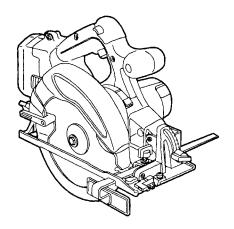
HITACHI

MODEL MODELO MODELO

C 6DC

CORDLESS CIRCULAR SAW SCIE CIRCULAIRE À BATTERIE SIERRA CIRCULAR A BATERÍA



INSTRUCTION MANUAL AND SAFETY INSTRUCTIONS

MARNING

Improper and unsafe use of this power tool can result in death or serious bodily injury!

This manual contains important information about product safety. Please read and understand this manual before operating the power tool. Please keep this manual available for others before they use the power tool.

MODE D'EMPLOI ET INSTRUCTIONS DE SECURITE

AVERTISSEMENT

Une utilisation incorrecte et dangereuse de cet outil motorisé peut entraîner la mort ou de sérieuses blessures corporelles!

Ce mode d'emploi contient d'importantes informations à propos de la sécurité de ce produit. Prière de lire et de comprendre ce mode d'emploi avant d'utiliser l'outil motorisé. Garder ce mode d'emploi à la disponibilité des autres utilisateurs avant qu'ils utilisent l'outil motorisé.

MANUAL DE INSTRUCCIONES E INSTRUCCIONES DE SEGURIDAD

ADVERTENCIA

¡La utilización inapropiada e insegura de esta herramienta eléctrica puede resultar en lesiones serias o en la muerte!

Este manual contiene información importante sobre la seguridad del producto. Lea y comprenda este manual antes de utilizar la herramienta eléctrica. Guarde este manual para que puedan leerlo otras personas antes de que utilicen la herramienta eléctrica.

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IMPORTANT INFORMATION

Read and understand all of the operating instructions, safety precautions and warnings in the Instruction Manual before operating or maintaining this power tool.

Most accidents that result from power tool operation and maintenance are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures.

Basic safety precautions are outlined in the "SAFETY" section of this Instruction Manual and in the sections which contain the operation and maintenance instructions.

Hazards that must be avoided to prevent bodily injury or machine damage are identified by WARNINGS on the power tool and in this Instruction Manual.

Never use this power tool in a manner that has not been specifically recommended by HITACHI, unless you first confirm that the planned use will be safe for you and others.

MEANINGS OF SIGNAL WORDS

WARNING indicates a potentially hazardous situations which, if ignored, could result in serious personal injury.

CAUTION indicates a hazardous situations which, if ignored, could result in moderate personal injury, or could cause machine damage.

NOTE emphasizes essential information.

SAFETY

GENERAL SAFETY RULES - FOR ALL BATTERY OPERATED TOOLS

MARNING: Read and understand all instructions.

Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

1. Work Area

- (1) Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- (2) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust of fumes.
- (3) Keep bystanders children, and visitors away while operating a power tool. Distractions can cause you to lose control.

2. Electrical Safety

- (1) A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery.
 - A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- (2) Use battery operated tool only with specifically designed battery pack.

 Use of any other batteries may create a risk of fire.

3. Personal Safety

- (1) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- (2) Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- (3) Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- (4) Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- (5) Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- (6) Use safety equipment. Always wear protective glasses. Dust mask, nonskid safety shoes, hard hat, or ear plugs must be used for appropriate conditions.

4. Tool Use and Care

- (1) Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- (2) Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- (3) Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- (4) Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tools. Such preventive safety measures reduce the risk of starting the tool accidentally.
- (5) Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- (6) When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.
 - Shorting the battery terminals together may cause sparks, burns, or a fire.
- (7) Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- (8) Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- (9) Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

5. Service

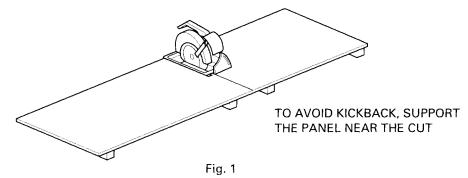
- (1) Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- (2) When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instruction may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

- DANGER! Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle or motor housing. If both hands are holding the saw, they cannot be cut by the blade.
 - Keep your body positioned to either side of the saw blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards. (See KICKBACK)
 - **Do not reach underneath the work**. The guard can not protect you from the blade below the work.
- 2. Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the Retracting Handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

- Check the operation and condition of the lower guard spring. If the guard the spring are
 not operating properly, they must be serviced before use. Lower guard may operate
 sluggishly due to damaged parts, gummy deposits, or a buildup of debris.
- 4. Lower guard should be retracted manually only for special cuts such as "Pocket Cuts" and "Compound Cuts." Raise lower guard by Retracting Handle. As soon as blade enters the material, lower guard must be released. For all other sawing, the lower guard should operate automatically.
- 5. Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.
- 6. **NEVER hold piece being cut in your hands or across your leg.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- 7. Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- 8. When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance for blade binding.
- Always use blades with correct size and shape (diamond vs. round) arbor holes. Blades
 that do not match the mounting hardware of the saw will run eccentrically, causing loss
 of control.
- 10. Never use damaged or incorrect blade washers or bolts. The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.
- 11. Causes and Operator Prevention of Kickback:
 - Kickback is a sudden reaction to a pinched, bound, or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.
 - When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.
 - If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.
 - Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:
- 12. Maintain a firm grip on the saw and position your body and arm in a way that allows you to resist KICKBACK forces. KICKBACK forces can be controlled by the operator, if proper precautions are taken.
- 13. When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or KICKBACK may occur. Investigate and take corrective actions to eliminate the cause of blade binding.
- 14. When restarting a saw in the workpiece, center the saw blade in the kerf and check that teeth are not engaged into the material. If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.
- 15. Support large panels to minimize the risk of blade pinching and KICKBACK. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

A TYPICAL ILLUSTRATION OF SUPPORT LARGE PANELS



- 16. Do not use dull or damaged blade. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding, and KICKBACK.
- 17. Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it will cause binding and KICKBACK.
- **18**. Use extra caution when making a "Pocket Cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause KICKBACK.
- **19.** Hold tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- 20. Never touch moving parts.

Never place your hands, fingers or other body parts near the tool's moving parts.

21. Never operate without all guards in place.

Never operate this tool without all guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety feature, be sure to replace the guard or safety feature before resuming operation of the tool.

22. Use right tool.

Don't force small tool or attachment to do the job of a heavy-duty tool.

Don't use tool for purpose not intended —for example—don't use circular saw for cutting tree limbs or logs.

23. Never use a power tool for applications other than those specified.

Never use a power tool for applications other than those specified in the Instruction Manual.

24. Handle tool correctly.

Operate the tool according to the instructions provided herein. Do not drc o or throw the tool. Never allow the tool to be operated by children, individuals unfamiliar with its operation or unauthorized personnel.

25. Definitions for symbols

V volts	
	direct current
$n_{\circ} \ldots \ldots$	no load speed
/min	revolutions or reciprocation per minute

26. Keep all screws, bolts and covers tightly in place.

Keep all screws, bolts, and plates tightly mounted. Check their condition periodically.

27. Do not use power tools if the plastic housing or handle is cracked.

Cracks in the tool's housing or handle can lead to electric shock. Such tools should not be used until repaired.

28. Blades and accessories must be securely mounted to the tool.

Prevent potential injuries to youself or others. Blades, cutting implements and accessories which have been mounted to the tool should be secure and tight.

29. Never use a tool which is defective or operating abnormally.

If the tool appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs by a Hitachi authorized service center.

30. Carefully handle power tools.

Should a power tool be dropped or struck against hard materials inadvertently, it may be deformed, cracked, or damaged.

31. Do not wipe plastic parts with solvent.

Solvents such as gasoline, thinner benzine, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents.

Wipe plastic parts with a soft cloth lightly dampened with soapy water and dried thoroughly.

IMPORTANT SAFETY INSTRUCTIONS FOR USE OF THE CORDLESS CIRCULAR SAW

MARNING: Death or serious bodily injury could result from improper or unsafe use of the cordless circular saw. To avoid these risks, follow these basic safety instructions:

- 1. Wear ear plugs when using the tool for extended periods. Prolonged exposure to high intensity noise can cause hearing loss.
- 2. Never wedge or tie safety cover open. Check operation of safety cover before each use. Do not use if safety cover does not close briskly over saw blade.

⚠ CAUTION: If saw is dropped, safety cover may be bent restricting full return.

- 3. For this mode, the saw blades range should be from 165 mm to 160 mm.
- 4. Never place hands or other body parts near the saw blade during operation. Hold the circular saw by its handle only.
- 5. Because the cordless circular saw operates by battery power, be aware of the fact that it can begin to operate at any time.
- 6. Wear eye and ear protection at all times.
- When working at elevated locations, clear the area of other people and aware of conditions below you.
- 8. It is important to support the work properly and to hold the saw firmly to prevent loss of control which could cause personal injury.
- 9. Guard against kickback: Kickback occurs when the saw stalls rapidly and is driven back towards the operator. Release switch immediately if blade binds or saw stalls.
 - Keep blades sharp.
 - · Support the panel near the cut.
 - · Use guide when ripping.
 - Don't force tool.
 - Stay alert exercise control
 - Don't remove saw from work during a cut while the blade is moving.
- 10. In operating, keep hold main body firmly.
- 11. Keep the light ON during cutting operation only. If it is lit ON in other cases, the main body switch can be inadvertently turned ON, resulting in unexpected accidents.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CHARGER

- This manual contains important safety and operating instructions for battery charger Model UC 24YF.
- 2. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.

- 3. To reduce risk of injury, charge HITACHI rechargeable battery type EB7, EB9, EB12, EB14, EB18, EB24 series. Other type of batteries may burst causing personal injury and damage.
- 4. Do not expose battery charger to rain or snow.
- 5. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
- 6. To reduce risk of damage to electric plug and cord, pull by plug when disconnecting battery charger.
- Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- 8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock.

If extension cord must be used make sure:

- a. That blades of extension cord are the same number, size, and shape as those of plug on battery charger:
- b. That extension cord is properly wired and in good electrical condition; and
- c. That wire size is large enough for AC ampere rating of battery charger as specified in Table 1

Table 1

RECOMMENDED MINIMUM AWG SIZE FOR
EXTENSION CORDS FOR BATTERY CHARGERS

AC Input Rating Amperes*			AWG Size	of Cord	
Equal to or	but less	Leng	th of Cord	, Feet (Mete	er)
greater than	than	25 (7.5)	50 (15)	100 (30)	150 (45)
0	2	18	18	18	16
2	3	18	18	16	14
3	4	18	18	16	14

* If the input rating of a battery charger is given in watts rather than in amperes, the corresponding ampere rating is to be determined by dividing the wattage rating by the voltage rating-for example:

$$\frac{1250 watts}{125 volts} = 10 amperes$$

- 9. Do not operate battery charger with damaged cord or plug-replace them immediately.
- 10. Do not operate battery charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
- 11. Do not disassemble battery charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- 12. To reduce risk of electric shock, unplug charger from receptacle before attempting any maintenance or cleaning. Removing the battery will not reduce this risk.

IMPORTANT SAFETY INSTRUCTIONS FOR USE OF THE BATTERY AND BATTERY CHARGER

You must charge the battery before you can use the cordless circular saw. Before using the model UC 24YF battery charger, be sure to read all instructions and cautionary statements on it, the battery and in this manual.

REMEMBER: USE ONLY HITACHI BATTERY TYPES EB7 SERIES, EB9 SERIES, EB12 SERIES, EB14 SERIES, EB18 SERIES, EB24 SERIES. OTHER TYPES OF BATTERIES MAY BURST AND CAUSE INJURY!

Follow these instructions to avoid the risk of injury:

MARNING: Improper use of the battery or battery charger can lead to serious injury. To avoid these injuries:

- 1. **NEVER** disassemble the battery.
- 2. **NEVER** incinerate the battery, even if it is damaged or is completely worn out. The battery can explode in a fire.
- 3. **NEVER** short-circuit the battery.
- 4. **NEVER** insert any objects into the battery charger's air vents. Electric shock or damage to the battery charger may result.
- 5. **NEVER** charge outdoors. Keep the battery away from direct sunlight and use only where there is low humidity and good ventilation.
- 6. **NEVER** charge when the temperature is below 32°F (0°C) or above 104°F (40°C).
- 7. **NEVER** connect two battery chargers together.
- 8. **NEVER** insert foreign objects into the hole for the battery or the battery charger.
- 9. **NEVER** use a booster transformer when charging.
- 10. **NEVER** use an engine generator or DC power to charge.
- 11. **NEVER** store the battery or battery charger in places where the temperature may reach or exceed 104°F (40°C).
- 12. **ALWAYS** operate charger on standard household electrical power (120 volts). Using the charger on any other voltage may overheat and damage the charger.
- 13. ALWAYS wait at least 15 minutes between charges to avoid overheating the charger.
- 14. ALWAYS disconnect the power cord from its receptacle when the charger is not in use.

SAVE THESE INSTRUCTIONS AND MAKE THEM AVAILABLE TO OTHER USERS OF THIS TOOL!

FUNCTIONAL DESCRIPTION

NOTE: The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the power tool.

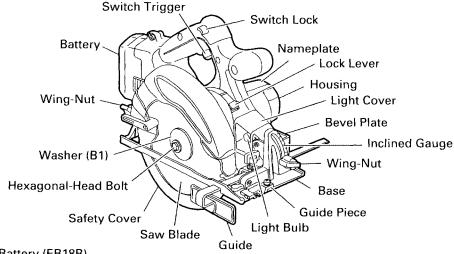
Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own power tool

MODEL

C 6DC (BFK): with charger and case

NAME OF PARTS

1. Cordless Circular Saw (C 6DC)



O Battery (EB18B)

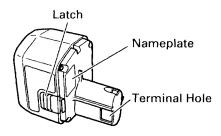


Fig. 2

2. Battery Charger (UC 24YF)

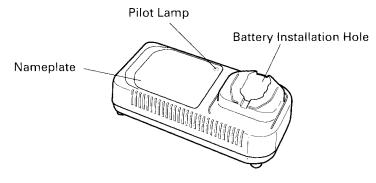


Fig. 3

SPECIFICATIONS

1. Cordless Circular Saw (C 6DC)

Motor	DC motor
No-load speed	3400/min
Max. Cutting Depth	2-1/4" (57 mm)
Blade Size	6-1/2" (165 mm) D \times 5/8" (15.9 mm) H \times 1/16" (1.6 mm) T
Battery (EB18B)	Nickel cadmium battery Voltage DC18V Charging and discharging frequency about 1000 times
Light Bulb	12V, 5W
Weight	7.3 lbs (3.3 kg)

2. Battery Charger (UC 24YF)

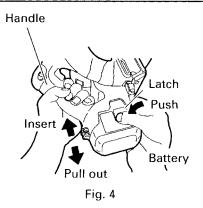
Input power source Single phase: AC120V 60Hz		
Charging time	Approx. 60min. (At a temperature of 68°F (20°C))	
Charger	Charging voltage	
Weight	2.2 lbs (1 kg)	

ASSEMBLY AND OPERATION

APPLICATIONS

Cutting Various types of wood.

REMOVAL AND INSTALLATION METHOD OF BATTERY



- O How to install the battery.

 Align the battery with the groove in tool handle and install it into place.

 Always insert it all the way until it locks in place with a little click. If not, it may accident
 - place with a little click, If not, it may accidentally fall out of the tool, causing injury to you or someone around you. (Fig. 4)
- How to remove the battery.
 Withdraw battery from the tool handle while pressing the latches on both sides of the battery. (Fig. 4)

CHARGING METHOD

NOTE: Before plugging into the receptacle, make sure the following points.

- O The power source voltage is stated on the nameplate.
- O The cord is not damaged.

MARNING: Do not charge at voltage higher than indicated on the nameplate.

If charged at voltage higher than indicated on the nameplate, the charger will burn out.

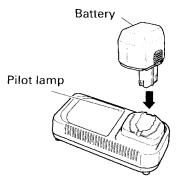


Fig. 5

- Insert the plug of battery charger into the receptacle.
 - When the plug of battery charger has been inserted into the receptacle, pilot lamp will blink in red. (At 1-second intervals)

MARNING: Do not use the electrical cord if damaged. Have it repaired immediately.

Insert the battery to the battery charger.
 Insert the battery into the battery charger as shown in Fig. 5. Make sure it contacts the bottom of the battery charger.

A CAUTION:

 If the batteries are inserted in the reverse direction, not only recharging will become impossible, but it may also cause problems in the charger such as a deformed recharging terminal.

3. Charging

When the battery is connected to the battery charger, charging will commence and the pilot lamp will light in red. (See Table 2)

NOTE: If the pilot lamp flikers in red, pull out the plug from the receptacle and check if the battery is properly mounted.

When the battery is fully charged, the pilot lamp will bilink in red slowly. (At 1-second intervals) (See Table 2)

(1) Pilot lamp indication

The indications of the pilot lamp will be as shown in Table 2, according to the condition of the charger or the rechargeable battery.

Table 2

		Indications of the pilot lamp	
Before charging	Blinks (RED)	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)	
While charging	Lights (RED)	Lights continuously	
Charging complete	Blinks (RED)	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)	
Charging impossible	Flickers (RED)	Lights for 0.1 seconds. Does not light for 0.1 seconds. (off for 0.1 seconds)	Malfunction in the battery or the charger
Charging impossible	Lights (GREEN)	Lights continuously	The battery temperature is high, making recharging impossible.

(2) Regarding the temperature of the rechargeable battery.

The temperatures for rechargeable batteries are as shown in the table below, and batteries that have become hot should be cooled for a while before being recharged.

Table 3 Recharging of batteries that have become hot

Rechargeable batteries	Temperatures at which the battery can be recharged
EB18B	23°F — 140°F (-5°C — 60°C)

(3) Regarding recharging time (At 68°F (20°C)) In approx. 60 minutes.

NOTE: The charging time may vary according to ambient temperature and power source voltage.

4. Disconnect battery charger from the receptacle.

A CAUTION:

Do not pull the plug out of the receptacle by pulling on the cord.

Make sure to grasp the plug when removing from receptacle to avoid damaging cord.

Remove the battery from the battery charger.Supporting the battery charger by hand, pull out the battery from the battery charger.

⚠ CAUTION:

- When the battery charger has been continuously used, the battery charger will heated, thus constituting the cause of the failures. Once the charging has been completed, give 15 minutes rest until the next charging.
- If the battery is rechraged when it is warm due to battery use or exposure to sunlight, the pilot lamp may light in green.
 - The battery will not be recharged. In such a case, let the battery cool before charging.
- When the pilot lamp flickers rapidly in red (at 0.2-second intervals), check for and take out any foreign objects in the charger's battery installation hole. If there are no foreign objects, it is probable that the battery or charger is malfunctioning. Take it to an authorized Service Center.

Regarding electric discharge in case of new batteries, etc.

As the internal chemical substance of new batteries and batteries that have not been used for an extended period is not activated, the electric discharge might be low when using them the first and second time. This is a temporary phenomenon, and normal time required for recharging will be restored by recharging the batteries 2-3 times.

How to make the batteries perform longer.

- (1) Recharge the batteries before they become completely exhausted. When you feel that the power of the tool becomes weaker, stop using the tool and recharge its battery. If you continue to use the tool and exhaust the electric current, the
 - battery may be damaged and its life will become shorter.

(2) Avoid recharging at high temperatures. A rechargeable battery will be hot immediately after use. If such a battery is recharged immediately after use, its internal chemical substance will deteriorate, and the battery life will be shortened. Leave the battery and recharge it after it has cooled for a while.

BEFORE USE

- 1. Check the work area environment.
 - Check the work area to make sure that it is clear of debris and clutter. Clear the area of unnecessary personnel. Ensure that lighting and ventilation is adequate.
- 2. Check if saw blade is tightened

While the saw blade is tightened securely for immediate use when it is assembled at the factory, be sure to check it out again for caution's sake. A bolt can be tightened when it is turned clockwise. Use the provided box wrench to check it out.

For further details, refer to the item of [MOUNTING AND DISMOUNTING THE SAW BLADE] on Page 20.

- 3. Check if wing nut is tightened If the wing nut to adjust cutting depth (Fig. 7) is loose, injury can result. Make sure that it is tightened securely.
- 4. Check performance of safety cover
- MARNING: Make absolutely sure that the safety cover is not fixed. Also, check and see if it can move smoothly. If the saw blade is kept exposed, injury can result.

The safety cover (refer to Fig. 2) serves to protect your body from coming into contact with the saw blade. Make absolutely certain that the cover smoothly performs to cover the saw blade. If the safety cover should not move smoothly, never use it without repairing it. In such a case, get in touch with the store where you bought the circular saw or the HITACHI Authorized Service Center for necessary repair.

- Check battery insertion
- ⚠ WARNING: If the battery is inserted while the power switch is in the ON position, the power tool will start operating immediately, inviting serious accident.
- CAUTION: Until the battery locks in place with a little click, if not, it may accidentally fall out of the tool causing injury to you or someone around you.

6. Check for proper operation of the brake.

This circular saw features an electric brake that functions when the switch is released. Before using the circular saw, ensure that the electric brake functions properly. If it does not, bring the tool to an Hitachi Authorized Service Center.

7. Prepare a wooden work bench (Fig. 6) Since the saw blade will extend beyond the lower surface of the lumber, place the lumber on a work bench when cutting. If a square block is utilized as a work bench, select level ground to ensure it is properly stabilized. An unstable work bench will result in hazardous operation.

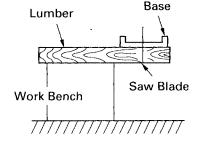


Fig. 6

A CAUTION:

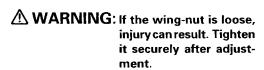
To avoid possible accident, always ensure that the portion of lumber remaining after cutting is securely anchored or held in position.

ADJUSTING THE SAW PRIOR TO USE

- 1. Adjusting the cutting depth (Fig. 7)
- MARNING: If the wing-nut is loose, injury can result. Tighten it securely after adjustment.

To adjust cutting depth, loosen the Wingnut and, while holding the base with one hand, move the main body up and down to obtain the prescribed cutting depth. After adjusting to the prescribed cutting depth, tighten the Wing-nut securely.

2. Adjusting the angle of inclination



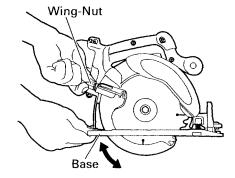


Fig. 7

As shown in Fig. 8 by loosening the wingnut on the inclined gauge, the saw blade may be inclined to a maximum angle of 47° in relation to the base. Always insure that the wing-nut is thoroughly tightened after making the desired adjustment.

NOTE: Values of the inclined gauge provided on the base merely serve as a rough guideline. For cutting operation at an inclined posture, use the circular saw after adjusting the angle between the base and the saw blade with a protractor, etc.

3. Adjusting the guide piece

On the circular saw, it is possible to make fine adjustment of the fixing position of the guide piece, where the saw blade and the premarked line are to be aligned. When the saw is shipped from the factory, the linear portion of a front scale on the guide piece is aligned with the central position of the saw blade. (Fig. 9) Loosen the fixed screw on the guide piece, should the fixing position be wrong, and make necessary adjustment of the position. (Fig. 10)

NOTE: For cutting operation at the inclination of 45 degrees, make adjustment so that the notch on the guide piece and the pre-marked line become aligned.

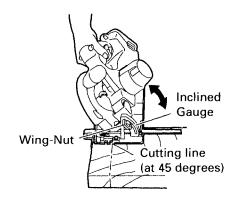


Fig. 8

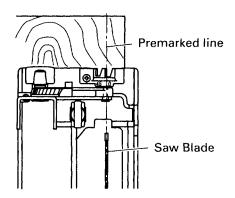


Fig. 9

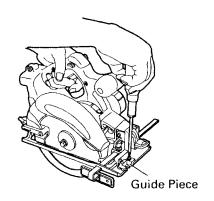


Fig. 10

4. Regulating the guide (Fig. 11)

The cutting position can be regulated by moving the guide to the left or right after loosening its wing-bolt. The guide may be mounted on either the right or left side of the tool.

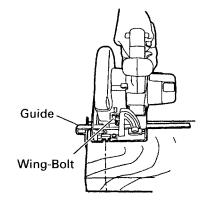


Fig. 11

OPERATION

⚠ WARNING:

- Never touch the moving parts.
- Never operate the circular saw with the saw blade turned upward or to the side.
- Do not fix and secure the switch lock. Besides, keep your finger off the switch trigger when the circular saw is being carried around. Otherwise, the main body switch can be inadvertently turned ON, resulting in unexpected accidents.
- Keep the light ON during cutting operation only. If it is lit ON in other cases, the main body switch can be inadvertently turned ON, resulting in unexpected accidents.

A CAUTION:

- Don't remove circular saw from workpiece during a cut while the saw blade is moving.
- Pull out the battery after completing operation.

NOTE:

Take care not to lock the motor. If the motor is locked, immediately turn the power off. If the motor is locked for a while, the motor or battery may be burnt.

- 1. Operation of switch (switch trigger and light switch)
- (1) For safe operation of the machine, a "switch lock" is provided on the side of a handle.

If the "switch lock" is pulled in a state where it is pressed in the direction of the arrow mark, the main switch can be turned ON.

And the "switch lock" is used as the "light switch". If the "switch lock (light switch)" is pulled in a state, the light is turned ON.

(2) After the switch is turned ON, even when you release your hand from the switch lock, the body continues running and the light continues being turned ON as long as you keep on pulling the switch trigger.

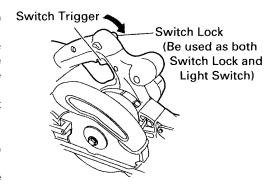


Fig. 12

- (3) If you release the switch trigger, you can turn OFF the switch and the "switch lock" returns to the original position automatically and the light turns OFF too.
- 2. Working performance per single charge (Reference data)
- Cutting capability differs according to the condition of lumber, type of saw blade, ambient temperature, battery characteristics, etc.

Wood	Capacity	
2 × 8 (Spruce-Pine-Fir)	80 (cuts)	
Concreteform plywood (1/2" (12 mm) t)	100 ft (30 m)	

To improve working efficiency per single charge,

- Minimize operation (no-load operation) other than cutting;
- Avoid any unreasonably forced pressure to the motor during cutting operation by twisting or pressing the circular saw forcibly;
- Avoid any use of dull saw blade.

3. Cutting procedures

A CAUTION:

- Recheck that the saw blade is securely clamped.
- Confirm that the wing-nut for adjusting the slot depth, the wing-bolt for adjusting the angle of inclination.
- (1) Place the base on the material, then align the premarked line and the saw blade with the guide piece front scale section at the front of the base. (Fig. 13)
- (2) When the base is not inclined, use the large notch as the guide piece. (Fig. 13, Fig. 14)

If the base is inclined (45 degrees), use the small notch as the guide piece. (Fig. 13, Fig. 15)

NOTE: When using the saw at the inclination of 45 degrees, use both the marks of [45 degrees] on the bevel plate and [45] on the inclined gauge of the base. (Fig. 16)

What's more, if it is absolutely essential to use the saw at a precise angle, make adjustment using a protractor, etc.

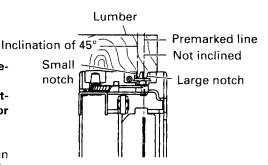


Fig. 13 (Top View)

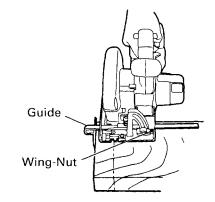


Fig. 14 Not inclined

(3) Ensure that the switch is turned to the ON position before the saw blade comes in contact with the lumber. The switch is turned ON when the trigger is squeezed; and OFF when the trigger is released. Moving the saw straight at a constant speed will produce optimum cutting.

A CAUTION:

- Before starting to saw, ensure that the saw blade has reached full speed revolution.
- Should the saw blade be stopped or made an abnormal noise during operation, turn off the switch immediately.
- When finished with a job, pull out the battery from the main body.
- Twisting and forcibly pressing the saw during cutting can result in unreasonable pressure on the motor, so try to go straight quietly.
- In the situation where the circular saw is continuously operated while replacing the battery with stocked spare batteries one after another, the motor tends to overheat. Therefore, whenever the housing becomes hot, give the saw a break for a while.
- Avoid cutting operation in a state where the base bottom is afloat from the material being cut. Otherwise, the motor can get locked.

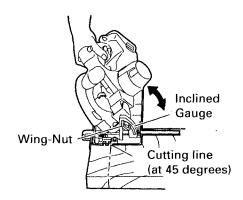


Fig. 15

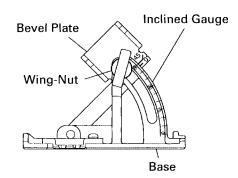


Fig. 16

MOUNTING AND DISMOUNTING THE SAW BLADE

⚠ CAUTION:

To avoid serious accident, ensure the switch is in the OFF position, and pull out the battery.

- 1. Dismounting the saw blade
- Set the cutting volume at maximum, and place the Circular Saw as shown in Fig. 17.
- (2) Depress the lock lever, lock the spindle, and remove the hexagonal-head bolt and washer(B1) with the box wrench.
- (3) While holding the safety cover lever to keep the safety cover fully retracted into the saw cover, remove the saw blade. (Fig. 18)
- 2. Mounting the Saw Blade (Fig. 19)

⚠ WARNING:

If the bolt is worked using other tools than the provided box wrench, excessive tightening and insufficient tightening may take place, resulting in injury.

O Take procedures here that are contrary to the detaching procedures.

NOTE:

- Thoroughly remove any sawdust which has accumulated on the spindle, bolt and washers.
- To assure proper rotation direction of the saw blade, the arrow direction on the saw blade must coincide with the arrow direction on the saw cover.
- Using the fingers, tighten the hexagonalhead bolt retaining the saw blade as much as possible. Then depress the lock lever, lock the spindle, and thoroughly tighten the hexagonal-head bolt.

A CAUTION:

After mounting the saw blade, reconfirm that the lock lever is firmly secured in the prescribed position.

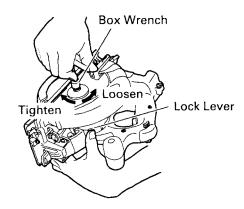


Fig. 17

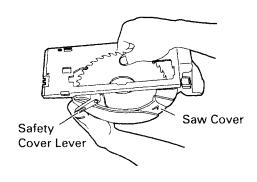


Fig. 18

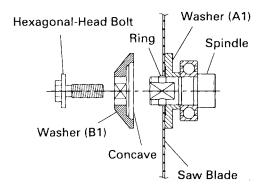


Fig. 19

REPLACING LIGHT BULB

⚠ WARNING:

- Make absolutely sure that the battery is removed from the main body before replacing the light bulb.
- Immediately after the light is turned OFF, the bulb retains high temperature. Make sure to cool down the light bulb thoroughly before replacing it so as to prevent burns.

⚠ CAUTION:

When replacing the light bulb, check the shape of base as well as the rating (12 V, 5 W), and then carry out perfect mounting. Otherwise, the light bulb can come off and/or cause overheat.

- 1. Detaching light bulb
- (1) Remove the convex part of the light cover from the concave part of the housing, and then pull out the light cover in the arrowmarked direction as shown in Fig. 20.
- (2) Push the back of the socket, and remove the socket and the light bulb together from the housing. (Fig. 21)
- (3) Remove the light bulb from the socket. (Fig. 22)
- 2. Attaching light bulb

 Take procedures here that are contrary to the detaching procedures.

NOTE:

- When attaching the light bulb to the socket, insert the light bulb until it lightly bumps against the socket.
- When attaching the socket to the housing, align the socket with the hole of housing while watching the back of the socket shown in Fig. 22, and insert the socket until it lightly bumps against the housing.

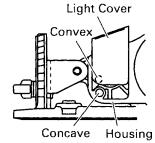


Fig. 20 (Side View)

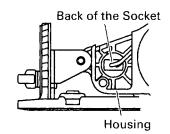


Fig. 21

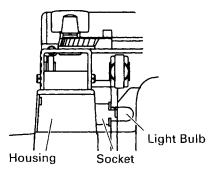


Fig. 22 (Top View)

MAINTENANCE AND INSPECTION

⚠ CAUTION: Pull out battery before doing any inspection or maintenance.

1. Inspecting the saw blade:

Since use of a dull saw blade will degrade efficiency and cause possible motor malfunction, sharpen or replace the saw blade as soon as abrasion is noted.

A CAUTION:

If a dull saw blade is used, reactive force is increased during cutting operation. Avoid the use of the dull saw blade without repair.

Check the mounting screws
 Loose mounting screws are dangerous. Regularly inspect them and make sure they are tight.

⚠ CAUTION: Using this power tool with loosen, screws is extremely dangerous.

- 3. Performance checkup and maintenance of safety cover Keep the safety cover in good shape for smooth performance at all times. Be sure to make prompt repair in case of any malfunction.
- 4. Adjusting the base and saw blade to maintain perpendicularity
 - The angle between the base and the saw blade has been adjusted to 90°, however should this perpendicularity be lost for some reason, adjust in the following manner.
- (1) Turn the base face up (Fig. 23) and loosen the wing-nut.
- (2) Apply a square to the base and the saw blade and, turning the slotted set screw with a slotted-head screwdriver, shift the position of the base to produce the desired right angle.

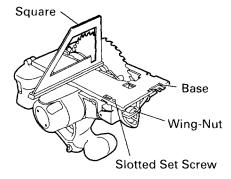


Fig. 23

Check for dust
 Dust may be removed with a clean rag or a cloth dampened with soapy water.

Do not use bleach, chlorine, gasoline or thinner, for they may damage the plastics.

6. Disposal of the exhausted battery

⚠ WARNING: Do not dispose of the exhausted battery. The battery must explode if it is incinerated. The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of it's useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

7. Storage

Storing in a place below 104°F (40°C) and out of the reach of children.

8. Service and repairs

All quality power tools will eventually require servicing or replacement of parts because of wear from normal use. To assure that only genuine replacement parts must be used, all service and repairs must be performed by a HITACHI AUTHORIZED SERVICE CENTER, ONLY.

ACCESSORIES

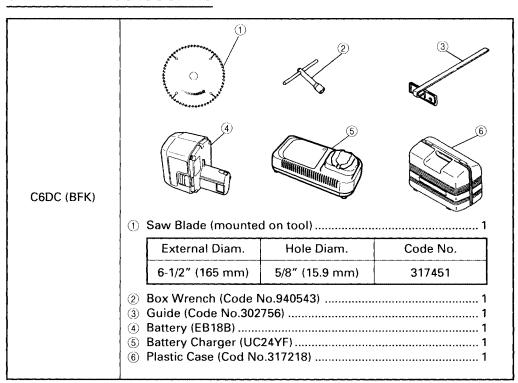
MARNING: Accessories for this power tool are mentioned in this Instruction Manual.

The use of any other attachment or accessory can be dangerous and could cause injury or mechanical damage.

NOTE:

Accessories are subject to change without any obligation on the part of the HITACHI.

STANDARD ACCESSORIES



OPTIONAL ACCESSORIES.....sold separately

1. Battery (EB18B)



2. Saw Blade

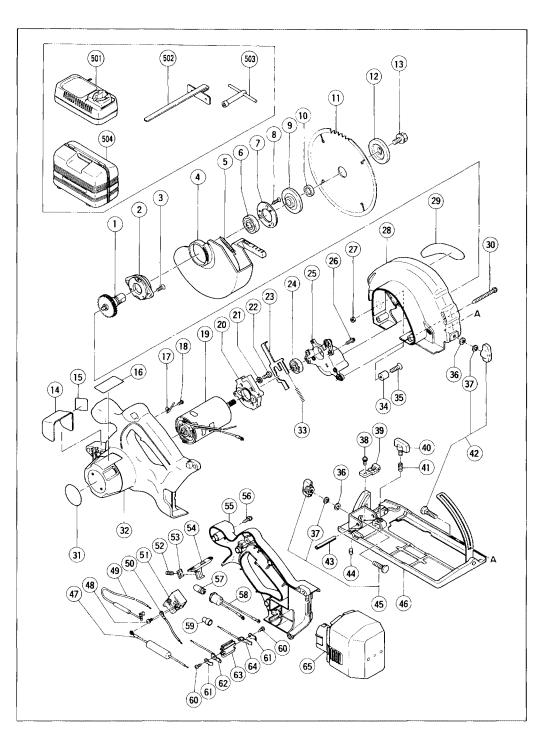
Use ... Cutting various types of wood.

3/3/2000

External Diam.	Hole Diam.	No. of teeth	Code No.
6-1/2"	5/8"	16 Pieces	302407
(165 mm)	(15.9 mm)	40 Pieces	317451

NOTE

Specifications are subject to change without any obligaiton on the part of the HITACHI.



Item No.	Part Name
1	Gear
2	Bearing Holder
3	Seal Lock Flat Hd. Screw $M5 \times 12$
4	Safety Cover
5	Return Spring
6	Ball Bearing (6002VVCMPS2S)
7	Bearing Cover
8	Seal Lock Flat Hd. Screw $M3 \times 12$
9	Washer (A1)
10	Ring D15.9/I.D14.5
11	TCT Saw Blade 165MM-D15.88 Hole
12	Washer (B1)
13	Bolt (W/Washer) M7 × 17.5
14	Light Cover Ass'y
15	Label (B)
16	Nameplate
17	Terminal (C)
18	Tapping Screw $D4 \times 10$
19	Motor (B)
20	Inner Cover (A)
21	Spring Washer M5
22	Machine Screw M5 × 10
23	Lock Lever
24	Ball Bearing (609VVMC2PS2S)
25	Inner Cover (B)
26	Nylock Bolt (W/Flange) M4 × 12
27	Nut M5
28	Saw Cover
29	HITACHI Label
30	Tapping Screw (W/Flange) $D5 \times 50$
31	Label (A)
32	Housing
33	Spring
34	Cushion
35	Flat Hd. Screw M5 × 20
36	Washer M6

Item No.	Part Name	
37	Super Lock WAsher	M6
38	Machine Screw (W/Washers)M4 × 8	
39	Guide Piece	
40	Wing Bolt	M6 × 18
41	Spring	
42	Bolt Ass'y (Square)	M6 × 22
43	Roll Pin	D6 × 22
44	Slotted Hd. Set Screw	M6×8
45	Bolt Ass'y (Square)	M6 × 20
46	Base Ass'y	· · · · · · · · · · · · · · · · · · ·
47	Resistor (A)	
48	Machine Screw (W/Washer) M3.5 × 6	
49	Resistor	
50	Terminal	
51	Switch	
52	Spring (F)	
53	Terminal (A)	
54	Knob	
55	Handle Cover	
56	Tapping Screw (W/Flang	e) D4 × 16
57	Lamp (12V 5W)	
58	Socket	
59	Connector (50092)	
60	Tapping Screw	D4 × 10
61	Holder Spring	
62	Terminal	
63	Terminal Piece	
64	Terminal	
65	Battery EB18B	
501	Charger (Model UC24YF)	
502	Guide	
503	Box Wrench	10MM
504	Case	

Parts are subject to change without any obligation on the part of the HITACHI due to improvements.



NICKEL-CADMIUM BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY. Please contact HITACHI KOKI U.S.A. LTD. at 1-800-59-TOOLS (toll free), or HITACHI AUTHORIZED POWER TOOL SERVICE CENTER recarding COLLECTION.



LES BATTERIES AU NICKEL-CADMIUM DOIVENT ÊTRE RECYCLÉES OU MISE AU REBUT DE FAÇON ADÉQUATE. Pour le RAMASSAGE, contacter HITACHI KOKI U.S.A. LTD. au 1-800-59-TOOLS (appel gratuit), ou UN SERVICE APRES-VENTE D'OUTILS ELECTRIQUE AGREE PAR HITACHI.



LA BATERÍA DE NÍQUEL-CADMIO DEBERÁ RECICLARSE O DEPOSITARSE EN EL LUGAR ADECUADO. Con respecto a la RECOLECCIÓN de baterías, póngase en contacto con HITACHI KOKI U.S.A. LTD. número 1-800-59-TOOLS (Ilamada gratis), o con HITACHI AUTORIZED POWER TOOL SERVICE CENTER.

Hitachi Koki Co., Ltd.

Shinagawa Intercity Tower A, 15-1, Konan 2-chome Minato-ku, Tokyo 108-6020, Japan